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Industrial Evolution: A Comparative Case Study of the Transformation fron Industry to Leisure in the Ports of San Francisco and Oakland, California.

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INDUSTRIAL EVOLUTION: A COMPARATIVE CASE STUDY OF THE TRANSFORMATION FROM INDUSTRY TO LEISURE IN THE PORTS OF SAN FRANCISCO AND OAKLAND, CALIFORNIA

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Abstract

This case study examined two waterfront sites on the San Francisco Bay – The Piers in San Francisco and Jack London Square in Oakland. The Piers, actually consisting of Piers 1 ½, 3 and 5, was formerly the point of entry for immigrants to the city and today is home to offices and restaurant space. Jack London Square, which covers four city blocks, is a project whose aim is to revitalize an industrial shipping port and warehousing district. Today, it is about halfway through its phased development schedule. Multiple techniques were used to investigate the process by which these two cities have transformed their waterfronts to improve their economic and environmental possibilities and the problems they have encountered in doing so. Documentation review, interviews with those involved with the two redevelopment projects, and visual observation on site were the means of collecting data which was then triangulated in order to identify patterns and principles of urban waterfront redevelopment. This process also identified three potential points of action for Oakland in its continued development of Jack London Square: 1) a more explicit integration of the Green Movement into the city's planning strategies, 2) the fostering of a more authentic sense of place on Oakland's waterfront, and 3) the improvement of Broadway as a connective corridor between Jack London Square and downtown Oakland.

Introduction

All cities possess possibilities. The potential for each city is inherent in its design and the various assets of its environment: climate, waterways, and natural resources. While cities in the past have often used natural resources for industrial production, an increasingly post-manufacturing America has been witnessing a shift in urban priorities. Industrial economies are transforming into leisure marketplaces. Streets once filled with blue-collar workers are giving way to tourists and consumers of recreational activity. A close analysis of this shift in San Francisco and Oakland, California yields valuable knowledge about how cities might appropriately utilize their economic resources, while simultaneously reclaiming their environmental and cultural heritage. In doing so, each city would not only create possibilities for enjoyment but also restore a sense of place for its citizens.

Seaports are optimal sites in which to study the changing relationship of cities to their natural environment. Comparisons of two distinct but closely related harbor locations which have redeveloped previously industrial sites into new uses reveal just how important an environment-based sense of place is in the successful conversion of an industrial port into a recreational urban waterfront. Two optimal cases for study are found in the San Francisco Bay Area: Piers 1 ½, 3, and 5 (constructed in 1931) in San Francisco and Jack London Square (founded in the late 19th century) in the former cargo port of Oakland. While some industry still exists in both cities out of necessity, the waterfront has become the public's again. These cities exhibit a phenomenon that is consistent throughout the United States regardless of a community's size, scope, or saga. Cities are reworking their environmental possibilities. The presence of water – be it in the form of a river, lake, ocean or bay—has become an opportunity to showcase and develop a city's culture, even though it may previously have served primarily as an industrial or trade resource.

While historically Oakland and San Francisco have relied heavily on the Bay for their livelihoods, their relationships with the water have been strictly utilitarian with little regard for environmental or social consequences. Today, however, San Francisco's relationship with water is primarily aesthetic, recreational, and tourist-driven, while Oakland's port strives to keep up with industrial demand while it develops its high-valued waterfront property. The question is, how does the history of the redevelopment of former industrial ports on San Francisco Bay help Oakland succeed in creating a distinct sense of place in Jack London Square?

Understanding how Americans perceive their relationship to surrounding space is paramount to understanding how they utilize the natural environment. As wilderness gives way to parking lots, landscaped parks, and city blocks, American towns and cities are losing an essential component of place-based character. An identity crisis results, one rooted in the loss of connections to natural processes. A space with strong identity should be almost unique to its cultural location and genuinely representative of its natural setting. A strange disconnection with nature in much of American life exists side by side with an intense yearning to inhabit it in the form of suburban lawns, trails and parks, or vacations in relaxing, idyllic landscapes.

When American cities were forming in the 15th and 16th centuries on the east coast, and the 17th and 18th centuries on the west coast, the presence of water was imperative to the establishment of a city. Rivers, lakes, and oceans provided a source of transportation, defense, food, and other resources. The settling of the San Francisco Bay, or the Golden Gate, is evidence of achieving the 19th century American belief in Manifest Destiny as well as opening a portal to future contacts with the Far East. The

cities of San Francisco and Oakland as well as other cities lining the bay were established because of the deep, naturally protected harbor the bay provided. By the 1960's, shipping traffic moved from the Port of San Francisco to Oakland on the eastern side of the bay. Since then, both cities have been attempting to shape their new waterfront identities.

This study examined how one public space in the port of San Francisco represents a variety of urban parameters and waterfront possibilities, all of which can guide the development of a public space on Oakland's port, Jack London Square, which is currently undergoing renovation. The site in San Francisco is constituted by Piers 1 ½, 3, and 5, commonly known today as "The Piers". Historically, the Piers was a point of arrival for numerous migrants and visitors who arrived at the nearby Ferry Building. For many years in the late 20th century, it remained relatively unused, but a 2003 restoration project reintroduced the area as vitally relevant to the city. It now consists of restaurants, high-end office space, and a public waterfront walkway. Jack London Square, on the other hand, was formerly a fishing dock and warehousing district. Currently it is being developed, in phases, into a multi-use district, filled with a hotel, recreational retail, restaurants and office spaces, along with significant exterior public space.

While there are several standardized ways of approaching waterfront development, professionals know that nothing can really be done by the book.[1] Experts recognize that context is important, but they often disregard it, claiming that local context and "character" is fine as long as it does not get in the way of profitability. At the level of public image, Oakland and San Francisco seem to be not only on opposing shores of a bay but on opposite ends of a perception gap. Yet historically, the cities have shared many of the same problems, and, as this study shows, this remains true even at the turn of the 21st century. The common denominators right below the surface are often overlooked.

The research described in this article was a portion of a larger comparative case study of the two Bay Area redevelopment projects. While less than seven miles apart on the same body of water, the case study data showed exactly how place-based contingencies ultimately determine not only the appearance of any one project but its success.

The specific research questions explored in this study were:

- To expose differences in motives for redevelopments of the cities' waterfronts.
- To identify differences in implementation of redevelopments of the cities' waterfronts.
- To define the built features of a leisure-based urban waterfront.
- To investigate how people use the developments for leisure activity on the waterfront.
- To understand the transformation and identify the physical and behavioral qualities of the sites.
- To determine the economic success of the two developments.
- To discover what aspects of the projects regard the natural environment, history, and culture of the area.

The results of this study are especially critical for the still under-construction Jack London Square, where understanding the multifarious contextual factors already at work can help ensure its longevity at a precarious moment in American economic history. This article provides a synopsis of study outcomes in the form of an essay on past, present, and future port development and a recommendation for points of action for the city of Oakland's continued development of Jack London Square. A brief overview of methodology is presented first as context for the discussion.

Methods

An exploratory case study approach was used to determine a pattern for how the San Francisco Bay Area is developing historically industrial areas into leisure-based waterfronts. The two case studies were the Piers in the Port of San Francisco and Jack London Square in Oakland. Robert Yin defined an exploratory case study as an approach in which an already established theory is applied to one or multiple cases, leaving the study questions and hypotheses partially undefined until research has concluded.[2] The characteristics of a case study are: a focus on a set number of real-life cases, attempts to explain causal links, reliance on multiple sources of evidence, importance of theory during the research process, and an ability to create a theory in conclusion. An exploratory case study uses a linear-analytic structure, a narrative sequence, and reliance on theory-building.[3]

Table 1 shows the links between the previously-identified research questions and tactics.[4] The term "tactics" is used to refer to techniques for obtaining information. After the tactics were completed, I triangulated the data to assess validity and discover patterns. Triangulation is a form of cross-examination in qualitative research in which multiple methods are used—in this case, documentation review, interviews, and observation—in order to produce a balanced and detailed picture of the situation.

Documentation Review

Documentation review was the primary tactic for analysis. It was imperative to establish the history, culture, and geography inherent to each site and to explore the histories of the ports as well as the morphologies of the locations. Understanding the culture and demographics of the port location and the larger city helped differentiate the unique qualities of the two sites. By recognizing the backgrounds for each case, a more accurate evaluation of the success of reconnecting people to the port was made possible.

The documentation review also provided written evidence in support of or contradiction to the information gathered during interviews and observations. Public documents, primarily newspaper articles and design plans, were analyzed to identify possible differences in motives and to determine the process of implementation of the waterfront redevelopments. I compared design documents to understand the transformation and physical forms of the sites through zone diagrams. It was also important to obtain historical photographs and descriptions to understand how the waterfront had been altered. I reviewed newspaper articles regarding the businesses within the sites in order to investigate the economic success of and public opinion about the two developments. In order to discover what aspects of the projects

reflected the natural environment, history, and culture, I carefully read newspaper articles and editorials. To understand how the redevelopments affected their surrounding areas, I identified sites mentioned in interviews and newspaper articles on area maps.

Interviews

As a secondary research tactic, I conducted interviews with people with direct knowledge of the sites' development and design. Since many of the other tactics used were secondary sources, interviews provided triangulation and filled in knowledge gaps regarding the development of the waterfronts. The interviews focused on the direct actors involved in the planning, designing, and construction of the sites.[5] The objectives of the interviews corresponded with those identified in Table 1.

Table 1. Research objectives and corresponding tactics.

Research Objective-to find/identify/understand:	**Tactics**
…differences in motives for redevelopments of the cities' waterfronts.	Documentation review Interviews
…differences in implementation of redevelopments of the cities' waterfronts.	Documentation review Interviews
…built features of a leisure-based urban waterfront.	Documentation review On-site observation
…how people use the developments for leisure activity on the waterfront.	Interviews On-site observation
…the transformation and the physical and behavioral qualities of the sites.	Documentation review On-site observation
…the economic success of the two developments.	Documentation review Interview On-site observation
…what aspects of the projects regard the natural environment, history, and culture of the area.	Documentation review Interview On-site observation
…how the redevelopments affect their surrounding areas.	Documentation review Interview On-site observation

Identifying Interviewees. In order to gain comparable data, it was important that each city had an equal number of interviewees with similar roles in the port developments. I identified interviewees based on their role and significance to the sites in Oakland and San Francisco. I attempted to contact three different people from each city: (1) representatives from a design firm for each site, (2) the developer of each project, and (3) the port authority for each site. I identified the designers through internet searches of developers' websites and media sources. The developers of the project were identified through an internet search. I contacted the port authority for each city for information regarding the cities' regulations and preferences for waterfront development.

Interview Format. The interviewees were first contacted through e-mail and phone. I identified myself as an undergraduate researcher, searching for the different elements and patterns of urban waterfront redevelopment. I used the preliminary phone interview to explain briefly the topic of research and establish the relevance and role that the interviewee had in the research process. At that time, an in-person interview time and date were established, when possible. Due to schedule constraints, not all of the identified parties were interviewed for this article.

I traveled to the Bay area to conduct the interviews. All of the in-person interviews were conducted in a semi-structured manner within one week of each other. I asked a series of five essential questions in order to structure the conversation.

- What were the priorities for this project?
- What previous projects did you analyze while working on this project? Why?
- How did you address the waterfront when redeveloping a portion of the city?
- How could this project be considered a success?
- How is this project unique in its surroundings? In the city?

These questions were designed to allow the interviewee to guide the conversation about the developments. I asked supplementary and probing questions as needed.[6]

The interviews were conducted in an office setting and lasted between thirty minutes and one hour. Tape recording and note taking were the primary means of data collection. These raw notes were then interpreted into a research template for comparison. Portions of the interviews were transcribed and added to this document. I used bracketing to include personal notations and thoughts.[7]

Analysis. I derived a common template for data collection summarization from the research documents for each interview.[8] This form helped organize information for each interview. The interview forms were then grouped according to city. I compared the forms among the interviewed and the cities. I used this triangulation method in order to verify sources as well as properly construct the overarching themes for each city and its development.

Observation

To supplement the other two research tactics (documentation review and interviews), I made on-site observations. Observational data was of utmost importance in order to develop a personal analysis of place. I recorded observations primarily through written field notes and photography. The objectives of observing were to identify the physical and behavioral qualities of the sites and then to explore the 3rd through 7th research objectives outlined in Table 1.

Analysis

The scope of this research project extended well beyond what is presented in this article. I began the analysis by analyzing each city's project separately, in order to establish an unobstructed view of each city and its redevelopment, without being influenced by the other project. Each city analysis contained information about the history of the port, the current Port Authority, key related projects, and a section on the specific redevelopment project.

In order to properly triangulate the data, I used a method of cross-examination. I started by extracting key themes within each city's analysis. I then created a table with all of the original research objectives. I placed the themes into this table in accordance with whether the theme contrasted between the two cities or was comparable between the two cities. Some of the themes transcended several of the research objectives, identifying what themes were most important in answering research questions and developing points of action for Oakland.

This article provides an overview of research outcomes. It demonstrates that the relationship of San Francisco's port project to Oakland's is not one of prototype to imitation. Instead, it is a

representation of how two cities can effectively redevelop their waterfronts, deploying different strategies, while acknowledging the existing factors that contribute to their advancement and identity.

Unveiling the Transformation

The Case Studies

San Francisco and Oakland seemingly share only one thing in common—the San Francisco Bay. In reality, however, the two cities' waterfronts share more than simply a body of water. Their motivations for redevelopment are not so different, nor are they different from those of many other cities. Revitalizing waterfront properties to create leisure-based, public spaces is the common goal, yet varying implementation strategies would create outcomes that identify each city as a unique and distinct place. A standardized implementation strategy would diminish each city's individual identity, even when the cities are as closely related historically and geographically.

Since 1850, the two cities have transformed their waterfront in drastically different ways. While the port of San Francisco had deep water, the city lacked terrain level with the water. The hills of San Francisco started to ascend right at the water's edge. Early San Franciscans combated this problem by filling in the Bay with earth to create flat swaths of land along the shore.[9] Oakland, just on the other side of the Bay, had the opposite problem. It had extensive amounts of flat land between the Bay and the Oakland Hills, but its primary location for shipping was along the estuary, where water was too shallow for large ships. Therefore, Oakland dredged its estuary to create deep enough channels for seafaring vessels.[10] This comparative study demonstrates that, through antithetical landscaping interventions in the 19th century, San Francisco and Oakland made their waterfronts alike and for the same purpose: industrial shipping.

Because of the different form and depth of the bay at portside, the cities' docks were built to different specifications. San Francisco has finger piers, which stretch far into deep water to accommodate large vessels with bulk break cargo.[11] However, this form of shipping and pier structure is largely obsolete. Nevertheless, today San Francisco is identifiable by its numerous piers stretching into the Bay (Figure 1). This traditional harbor structure is often what comes to mind when thinking of ports—long, extended slivers for docking ships.

Close observation of Oakland's waterfront, however, reveals a very different character. Small docks supporting mid-size ships are prevalent within the inner estuary, which is protected from the larger Bay. Here, the waterfront is identified by huge concrete slabs stretching into the Bay (Figure 2). The slabs blur where the land actually ends and the piers begin. Rows of gantry cranes are bolted to these concrete docking stations. It is the cranes' strong visual presence – especially the rhythm of their patterned placement – that creates a sense of place and identity for Oakland.

During the Gold Rush in 1849, the role of the port of San Francisco was to transport miners from the city inland to the gold mines while providing storage and transport for necessary equipment, supplies, and food.[12] Oakland, at this point in time, was simply called the *contra costa*, or opposite shore.[13] As a Gold Rush town, its role was to facilitate the transport and support of miners and goods. With the completion of the transcontinental railroad in 1869 and the Panama Canal in 1914, San Francisco became the major port of the West Coast, with Oakland as a close second. The outer harbor utilized long docks to access larger ships in deeper water, while the natural estuary between the island of Alameda and Oakland provided protection and calm waters for smaller vessels. This inner harbor area was the location of Jack London Square which consisted of a fishing wharf, a wholesaling and warehouse district, and working class amenities.[14]

Influenced by the City Beautiful movement in the early 20th century, San Francisco built their city, from the civic center to the waterfront, in grand, neoclassical style.[15] Even the industrial shipping piers had a Beaux-Arts facade. Shipping in the early 1900's was done through break-bulk cargo, meaning cargo that is broken down into small units.[16] This inefficient and costly method of shipping changed in the middle of the century. During World War II, the military had a heavy presence on San Francisco's waterfront which made expansion of harbor industries difficult, especially reconstructing the piers to accommodate this new form of shipping. The intermodal system of shipping was developed in the 1950's in order to "link various modes of transport into one integrated system."[17] Standardized steel containers packed with goods and materials were carried by ship, train, and truck. By the late 1960's, Oakland surpassed San Francisco as the largest port on the Bay with total annual cargo of 2.5 million tons, and by the 1980's, almost all available waterfront land had been redeveloped to accommodate container shipping. Oakland had an obvious geographical advantage over San Francisco for this form of shipping, since the intercontinental railroad terminated at the Oakland waterfront and many major highways were easily accessible from the city.

Due to the decline in industrial waterfront activity and the presence of the Embarcadero Freeway—an elevated highway which cut off the city from its waterfront because it spanned the entire length of the waterfront—the San Francisco harbor was relatively unused for several decades in the late 20th century. Demolition of the Freeway in 1992 and recent redevelopment projects have sought to reconnect the public with the water while maintaining its historic character. On the other side of the Bay, Oakland is the fourth busiest port in the United States which makes commercial redevelopment of the waterfront costly and challenging for the city.

In San Francisco, Piers 1 ½, 3, and 5 occupy a single structure on the waterfront just north of the Ferry Building, adjacent to the city's Financial District (Figure 3). Piers 1 through 5 are considered part of the Ferry Building neighborhood and share its Beaux-Arts architectural style and monumental presence. This area has specific design criteria to ensure continuity of urban space, including roof height standards and maintaining its historic character.[18] Originally built in 1919, the Piers were redeveloped in 2003 as a single project by the development firm Pacific Waterfront Partners, creating high-end office space, several restaurants, and public waterfront access.

On the other side of the bay in Oakland, located where Broadway meets the estuary, Jack London Square has always been the face of Oakland's waterfront (Figure 4). The Square is more than a traditional plaza: it is a neighborhood around 7 blocks long and 2 blocks wide. In the 19th century, it was a bustling, working waterfront and the site of the first regular ferry service to San Francisco. In 1950, the Square was named after Jack London (1876-1916), the famed author, socialist, and Oakland

Figure 1. San Francisco's waterfront is lined with finger piers. Photo courtesy of Christian Abend.

Figure 2. Oakland's port is dotted with the iconic gantry cranes. Photo courtesy of the Smithsonian Institute.

resident.[19] The area started to accommodate tourism in the 1930's when the wharf provided berths for commercial fishing, a fish market, and a seafood restaurant.[20] However, it was in the 1950's that Jack London Square took on the form that is recognizable today. Nevertheless, in the following decades, Jack London Square would slowly lose its visitors, tenants, and vibrancy. In the early 21st century, the development firm Ellis Partners began a phased redevelopment process for the area through the creation of significant exterior space, retail and office space, restaurants, and other public amenities.

The waterfront sites in each city were originally chosen for this study because of their linked industrial histories, but close analysis showed that they treated their industrial heritage in very divergent ways. San Francisco's waterfront has shifted its industry to less visible locations along the southern waterfront.[21] Oakland, on the other hand, continues to embrace industry, and thus, showcases its machinery in the design of the waterfront. Since San Francisco's shipping industry is now practically non-existent, displaying that heritage would be nearly impossible. Instead, San Francisco's waterfront embodies its current role as a cultural, political, and tourist destination. The waterfront is filled with neoclassical buildings, such as the Ferry Building, and it offers sweeping views of the city of San Francisco (Figure 5).

In contrast, Jack London Square, which itself is no longer industrial, frames views of flourishing industry as a proud icon of the city of Oakland (Figure 6). One finds that restaurants on the Square, such as Il Pescatore, brag about their waterfront location with great views of the estuary and gantry cranes. These eye-catching structures are representative of what Oakland has become: hard-working, globally relevant, and prosperous. San Francisco altered its waterfront to accommodate tourism and small-scale industry, while Oakland is developing its waterfront to enhance its shipping industry and to optimize areas of the waterfront for commercial real estate.

City Beautiful versus City Green

San Francisco's waterfront design is deeply indebted to the City Beautiful movement of the early 1900's, in that the harbor consists of monumental buildings in a neoclassical style and streets with sweeping views.[22] Even the water's edge has been designed, constructed and redeveloped to enhance this style of city building. The recent redevelopment of the Ferry Building Area, including Piers 1 ½, 3, and 5, perpetuated this design ethos while modernizing and adaptively reusing the neoclassical structures.

Originally, the City Beautiful movement encouraged monumentality and beauty for the sake of the public; the city's beautification was expected to improve the quality of life for all citizens. Piers 1 ½, 3, and 5 lay derelict for a large part of the late 20th century. While being a product of the 21st century, their redevelopment in 2003 is actually a very "City Beautiful" response to a contemporary problem. The redevelopment restored the structures to their original grandeur, improving the quality of the waterfront for the use of the public. Taken together, the Piers and the Ferry Building, which was also restored in 2003, serve as a small scale version of what the City Beautiful movement strove to do: enhance the aesthetics of structures to improve the public's well-being and to foster pride in their city.

A century after the City Beautiful movement and on the other side of the Bay, Oakland's waterfront redevelopment has been guided by a different kind of movement – the Green Movement.[23] Parallel to the changes that occurred in the early 1900's, the

phenomenon of creating a more inhabitable city accelerated again at the turn of the 21st century. The Green Movement advocates increasing green space, reducing pollution and greenhouse gas emissions, building sustainable structures, encouraging exercise, and using environmentally-friendly products. Influenced by the

Figure 3. San Francisco's Pier's 1 ½, 3, and 5 and its surrounding area. Photo courtesy of Austin Aerial Photography. Photo Illustration by author.

Green Movement, the Ellis Partners, developers of Oakland's Jack London Square, have addressed this contemporary trend in land development and city building to some extent.

A close examination of the Port Authority's master plan and development goals affirms that the majority of Oakland's commercial redevelopment efforts in the past decade have been directed at creating more open, green space for the public in the form of parks and trails.[24] Oakland is constructing paths that contribute to the Bay Trail project which involves encircling the Bay's waterfront with a 500 mile biking and walking trail.[25] This trail system enhances public outdoor space used for leisure. Facilitating access to venues for outdoor recreation and physical activity is an aspect of the Green Movement which distinguishes it as a social movement, not simply a development strategy.

Since Jack London Square is largely a collection of new buildings and renovated older structures, Oakland, unlike San Francisco, did not face pressure to preserve a distinct architectural flavor. The keystone building of the project, the Jack London Market building (Figure 7), is certified LEED silver, the third highest possible sustainability certification.[3] All of the structures on Jack London Square, old and new, embrace variations on modern design rather than emulating the character of older surrounding buildings. Identifying the "look" of Green Movement buildings is much more challenging. Due to modern design criteria, cities do not seek the regularity and replication of neoclassical buildings and city design. Modern designers are less constricted by rules and canons, so they are able to design more freely. However, when designing buildings for LEED certification, geographical factors and climate limit the freedom of the designer, but in the process may fashion a local visual identity or "style." Hence, while the City Beautiful movement's stylistic qualities are recognizable anywhere in the country, buildings reflecting Green Movement ideals are more linked to individual regional

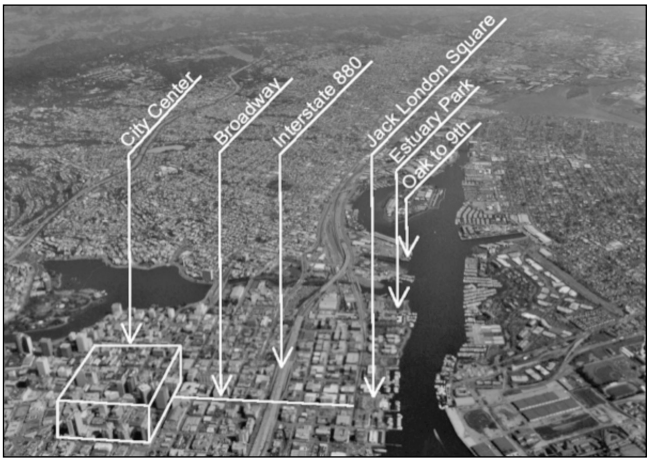

Figure 4. Oakland's Jack London Square and its surrounding area. Photo courtesy of Derrick Coetzee. Photo Illustration by author.

contexts. In the Bay Areas, the City Beautiful movement and the Green Movement have produced distinct spaces in similar settings less than ten miles apart.

Urban Design at the Waterfront and Beyond

In defining the spaces of a leisure-based urban shoreline, the Bay Area cities provided distinct solutions: a corridor-like, linear arrangement in San Francisco versus a series of outdoor rooms in Oakland. While these architectural designs stand in strong contrast with one another, their programs are comparable. Like other industrial harbors converted into recreational urban waterfronts, they favor mixed-use developments with significant exterior public space.

Figure 5. San Francisco's neoclassical building style. Photo by author.

What makes portside development at the Piers and Jack London Square attractive is the water. It is imperative that architecture and exterior spaces are oriented towards it. Visual documentation of the two sites showed that, while their structures act as a boundary between the water and the rest of the city, once

Figure 6. Oakland's iconic gantry cranes.
Photo courtesy of David Sanger.

inside the projects, the focus is on the water's edge. Oakland's site sets up a plaza-like exterior, surrounded by buildings with swaths of windows facing the water (Figure 8). Views are not only framed by glazing within buildings, but also by the spaces between buildings which allow glimpses of the estuary. The streets in Jack London Square's neighborhood are in a strict grid pattern, creating blocks of open space, rather than lines of space. San Francisco's edge is much more linear, a corridor echoing the Embarcadero, the expansive boulevard that connects one end of the waterfront to the other. The Piers' bulkhead building is simply a voluminous extension of that linear corridor, which simultaneously creates a threshold or buffer between the bustling financial district and the calm bay (Figure 9). Thus these different building strategies – room versus corridor – create experientially distinct spatial configurations which are suggested by surrounding circulation and street patterns.

All cities along the San Francisco Bay appreciate the value and appeal of access to the waterfront. Oakland's and San Francisco's recent development efforts are designed for visitors to have direct contact with water. Careful observations of day-to-day activities at the ports suggested that the new developments deliberately encourage recreational boating, not just commercial or industrial shipping, by providing public docks and marinas. Giving the public the option to be on top of the water, rather than just looking at it from the shore, is a key component to urban waterfront redevelopment. Hence, in a sense, both cities have made the water part of the land, extending the space in which activities take place.

Simon Snellgrove, developer of the Piers project in San Francisco, pointed out that a central reason for the success of the Ferry Building Area is its close proximity to the city's financial district and to many modes of transportation.[26] Oakland's downtown is not directly on the waterfront; it is one mile up Broadway from the estuary. Addressing the issue of location is one of the greatest challenges for Jack London Square's revitalization. Optimists, such as architect Steve Worthington, believe that the excitement and success of the revitalization will naturally bring about developments along the Broadway corridor, which will link the activities of downtown to those at the waterfront.[27] This may be true, but his assumption relies on the premise that Jack London Square will be successful first, with or without a thriving corridor connecting it to the city center.

In order to truly evaluate the success of any city revival project, one must determine the degree to which a project is self-contained as well as how it affects adjacent neighborhoods. The analyses in this case study provide new insights concerning how the proximity of a harbor to a city center affects waterfront redevelopment. San Francisco's Ferry Building Area, being adjacent to the financial district, has never really lost traffic. Even when the Embarcadero Freeway cast a shadow over the area during the last half of the 20th century, the bustling business district flourished just a few blocks away. When industry was relocated away from the core of the port, San Francisco did not need to make a case for the area, as it was already central to the city, even if it was underutilized. Jack London Square, whose relevance to Oakland has always been acknowledged, has nevertheless lacked a significant connection to the city's bustling downtown. Rather than stumbling upon Jack London Square, a visitor must intentionally venture to Oakland's waterfront in order to enjoy it. Oakland recognizes this and has attempted to market Jack London Square as a destination by providing substantial parking infrastructure and creating the free "B" shuttle, a bus which runs between downtown and the Square.[28] These initiatives solve some of the connectivity dilemmas, but they do not change the fact that visitors must already be aware of the existence of Jack London Square.

When there is a need for area-wide revitalization, as there is in Oakland, a waterfront project is potentially a catalyst for growth. Since the edge of San Francisco's financial district has been heavily inhabited for decades, the Piers project was not burdened with the responsibility of fueling redevelopment in the surrounding area. The Piers are more of a model project for future port renovations in San Francisco than a vehicle for neighborhood revitalization. Jack London Square, in contrast, is surrounded by property in need of rehabilitation in order to foster a more cohesive neighborhood. The Square may, in fact, transform its neighborhood more than the Piers redevelopment influenced its surrounding area, but the need for change is greater in Oakland.

Place-Making

In terms of place-making, theorists tend to be in agreement with the basic principle that the natural environment, history, and

Figure 7. Oakland's Jack London Market building. Photo by author.

culture of an area are key to distinguishing one place from another and providing each with a unique identity.[29] At the waterfront, reverence for locality is particularly crucial. The environment is fragile, and a port is often home to rich histories of a city. Both Oakland and San Francisco address the past by preserving historical buildings and creating educational itineraries throughout the neighborhoods. San Francisco's "History Walks," which provides historical information on plaques, is a fitting example, as are the many references to author Jack London in Jack London Square. However, more often than not, the two cities differ in the manner in which they address culture and the environment.

Planning movements can shape a city's identity. San Francisco's waterfront, as a product of the City Beautiful movement, emerges as one extremely conscientious of the public's aspirations to shape society. The monumental buildings designed in the City Beautiful era do not necessarily mirror the existing culture; instead, they seek to image a better society for the future. As a city known for its social activism and radicalism, the City Beautiful movement's desire to change the very structure of society is telling of the culture of San Francisco in the 20th century. The most recent redevelopments – like the Piers – aim to modernize the City Beautiful port.

The Piers renewal strikes a delicate balance between preserving the city's history and modernizing its structure to accommodate today's urban culture. It is the tenants, not the architectural surroundings of the port, which reflect the current culture of San Francisco.[30] The city is particularly known for its strong views on environmental and social integrity. So, even though the Piers project is not an LEED certified building or an environmental education site, it does successfully represent key aspects of San Francisco's culture, thereby helping to give the city a unique sense of place as a progressive, diverse community with a strong appreciation for its dynamic history.

Figure 8. Jack London Square's plaza-like exterior. Photo courtesy of the Ellis Partners.

Figure 9. The Piers' corridor-like waterfront designPhoto by author.

In contrast to the City Beautiful movement, the Green Movement actively addresses environmental concerns as a means of place-making. While Jack London Square was not designed to be a model project for this movement, it has been heavily influenced by it. The desire for LEED certification can be as much a response to societal demands as it is the developer's feeling of obligation to the environment. Enhancing outdoor recreational facilities is a facet of the Green Movement which promotes an active lifestyle while fostering appreciation for nature. The Green Movement is a multifaceted cultural movement in itself, one that includes goals for the natural environment, urban design, and social welfare.[31] It strives for a more responsible, less wasteful population which, by being aware of its environmental impact, becomes more conscious of the uniqueness of place.

Jack London Market, the LEED certified anchor building of development, is the center of Oakland's socially sustainable food movement, the activities of which have been well documented in the Oakland press.[32] Jack London Square, the third corner of an emerging "culinary triangle" consisting of Oakland, San Francisco, and Berkeley, reinforces the avid food culture of the Bay Area.[33] Food is obviously a necessity to all humans, but the plethora of fresh, local ingredients, acclaimed restaurants, and diverse populations, echoes the culture and environment of northern California. Based on current theories of place-making, this case study argues that providing locations for dining near the sea and the land that produced the food, as Oakland does, reinforces a sense of place.[34] By addressing the Bay Area food lifestyle, both Jack London Square and the Piers offer a unique juxtaposition of contemporary and historical culture, nature, and commerce.

When analyzing the success of a city's redevelopment project, the most important, yet complex, variable to consider is the context from which a project emerges. San Francisco's Piers 1 ½, 3, and 5 and Oakland's Jack London Square do not differ substantially from one another in program, climate, or motive, yet the public views them as unrelated projects due to the cities' reputations.[35] The real distinction between the two projects is temporal. San Francisco's efforts have perpetuated an image based

on the port's historical, early 20th century design. Oakland's port revitalization, on the other hand, is almost entirely contemporary. It is currently in the *process* of rehabilitating the estuary shore while establishing a waterfront identity. What makes the case study comparing San Francisco's Piers and Oakland's Jack London Square so compelling is that, while the two cities share a close history, their waterfronts are products of two different centuries. Hence, the city of Oakland must proceed discerningly when considering San Francisco as a model for its own port revitalization.

Points of Action

This comparative analysis of the Piers in San Francisco and Jack London Square in Oakland suggests a need to reassess Jack London Square's development plan in order to ensure that the city maximizes its potential as a revered waterfront destination on the San Francisco Bay. Given that the redevelopment project is not yet complete, the outcome of this study can be formulated as three points of action which revolve around some of the principles of the Green Movement that will facilitate the successful transformation of Jack London Square into a vital nexus of urban life.

Point of Action #1. Driven by society's demand for monumental civic buildings and spaces and grand boulevards, the success of the City Beautiful movement nationwide stems largely from its role as a significant social movement. In San Francisco, it created much of the layout of the city's urban fabric and filled it with notable edifices. Preserving these early 20th century buildings has become an integral part to every redevelopment initiative in San Francisco, even along the waterfront. The movement bestowed a unique character on San Francisco's port, which is a source of pride to San Franciscans and interest to visitors. The first point of action for Oakland in its bid to successfully create a vibrant, unique recreational waterfront at Jack London Square is to acknowledge and harness the immense power of a movement which links social idealism to built forms.

The Green Movement has already influenced certain aspects of Jack London Square development (e.g., the design of the Jack London Market building), but the city of Oakland needs to embrace the movement as a total urban reform. The Green Movement has the capacity to improve cities as effectively as the City Beautiful Movement. Indeed, a full-fledged commitment to an integrated program of reform is necessary for Jack London Square, because the Square alone is widely viewed as the catalyst for the future revitalization efforts at the Port of Oakland.[36] By contrast, the City Beautiful movement in San Francisco shaped many neighborhoods in the urban fabric, so that the Piers renovation project is not solely responsible for its own success or failure, or that of the surrounding district. If Oakland develops the project through the social and built environment ideals of the Green Movement, the chances of Jack London Square becoming and remaining a vibrant and relevant neighborhood in the decades to come is very high.

The very fact that Oakland chose to redevelop Jack London Square – an environmentally abused area lacking in social or economic activity - was in and of itself already a quintessentially "Green" act. The area was a drain on the city of Oakland instead of an asset. Harnessing the Green Movement in all of its facets would make Jack London Square a superior example of a 21st century mixed-use development, one that embodies environmental concerns, social health, and economic strength. The Ellis Partners' current development strategy attempts to address some aspects of these issues, but it lacks consistency. Several buildings have been LEED certified but others have not. Outdoor spaces encourage physical activity but they are not yet well-integrated with nearby city neighborhoods. Implementing the plan through phases is more sustainable in an uncertain economic climate, but the lack of short-term investment poses the risk of the project never being complete.

To truly harness the Green Movement, the developers of Jack London Square need to continue to find ways of salvaging what remains in the area, whether that be existing culture, architecture, building materials, or businesses. In some ways, the creation of food as a theme, with Oakland as the third vertex of the Bay Area's culinary triangle, does attempt to do this, but it is a very small niche in a much larger societal movement. To avoid being gimmicky or creating the impression of a fabricated tourist trap, Jack London Square has to do more than simply display signs about LEED certification and the benefits of eating organic, local food. It must *realize* Green ideals by producing space for them rather than merely proclaiming them in plaques and posters. Extending the waterfront bike trail, for example, is integral and a significant step in the right direction. It highlights the juxtaposition of nature and the constructed environment, while expanding the accessibility of Jack London Square to other communities along the shore. If the developers can continue to make efforts that nurture Green culture, Jack London Square will become truly sustainable – socially, environmentally, and economically – and an enduring piece of Oakland's dynamic urban mosaic.

Point of Action #2. In contrast to the Piers of San Francisco, Jack London Square lacks a strong sense of place. Its mixed-style buildings and open-air plan are preferable to the monotony of many contemporary developments, but this ad hoc mixture of colors, patterns, and incongruous buildings lacks an identifiable character. The look of the area is not deeply rooted in a single movement of the past, like the City Beautiful movement, so the Port of Oakland must take an active role in cultivating the Square's identity. Using the Green Movement as a vehicle, Oakland can present the waterfront in a more distinctive light.

With a heavily industrialized warehouse district surrounding it, Jack London Square should integrate the nearby buildings and activities they house with the natural environment, both the water and the land. Simply preserving green space or renovating buildings will not substantially change the character of the area unless those spaces are experienced by citizens. With bike trails and a multitude of water sporting activities, Jack London Square is not merely a leisure waterfront for passive enjoyment. It is also becoming an actively recreational harbor. Even a proposal for the new market building does not simply provide a place to dine or shop; it also offers visitors cooking classes. By distinguishing itself as a generator of active social engagement, rather than a passive vessel for non-working time, Jack London Square can achieve a greater sense of place without succumbing to superficial gestures.

Unlike many other waterfronts where consumption is the main activity, Jack London Square has the space and the time to establish itself as an everyday gathering place. It does not require a substantial amount of money or status. Distanced from downtown, it needs to provide more than just dining options. It must supply a distinctive experience. To create a place of meaningful activity is consistent with the principles of the Green Movement. Spending money on an experience, rather than on the consumption of goods, Jack London Square would produce less waste and discourage mindless spending, becoming a more environmentally and economically sustainable place in the minds of Bay Area citizens. One basic principle of the Green Movement is to "think globally, act locally."[37] If a visitor familiarizes him or herself with Jack London Square through personal interaction and purposeful skill-building, the area is remembered for what it offered. By fostering a connection between Jack London Square and its visitors, more meaningful than simply a meal or a shopping bag, those developing the Port of Oakland can better formulate exactly how they want Jack London Square to be experienced.

Point of Action #3. The problem of connectivity is perhaps more threatening to the sustainability of Jack London Square as an Oakland waterfront institution than any other concern, including the worldwide economic recession. The fact that the Square is a mile from the downtown is not an inherent predicament, because many city centers have developed away from prominent leisure locales. The problem is that in a dense, urban environment such as the Bay Area, a development hoping to become a destination must be linked to other nodes of activity. Particular focus must be concentrated on the one-mile stretch of Broadway connecting downtown Oakland with the bay.

Large sites for non-working time such as stadiums, zoos, or theme parks, are typically distanced from substantial urban activity because of the extensive parking and amenities necessary to accommodate a large number of guests. Patrons generally make an event out of these activities, perhaps spending a full-day enjoying the offerings. A marked difference between these sorts of developments and Jack London Square is that the latter provides both leisure and recreation, but at a smaller scale. Hence, people must be able to access the area easily, whether that be for a quick lunch or a half-day visit.

Due to the crime rates and public image of downtown Oakland, distancing the development from the center of activity is not inherently a bad formula. The Port and City of Oakland should, however, be able to link the two areas through varied modes of transportation, not simply the free "B" shuttle. This is another facet of the Green Movement which, if embraced fully, would strengthen the development as the physical manifestation of a social ideal. Oakland could do this by integrating the existing bike trail system, which is currently limited to the Bay shore, into the city fabric. Providing a safe and scenic transportation option – one which is also a recreational activity – should highlight Jack London Square as a destination in the planned 500-mile Bay Area trail network.

Data gathered in this study support the premise that connectivity within Oakland could also be enhanced through a more thoughtful development of Broadway. In the city center, restaurants, shops, offices, and other necessities line the middle of Broadway. If Broadway could be enhanced as a transitional corridor from a typical downtown street to the recreational waterfront at Jack London Square, the Square would not feel as cut off and separated from downtown as it is now. This sense of insuperable division is largely due to the presence of Interstate 880 overpass which bisects Broadway between the city center and the waterfront. By altering the passage under this overpass so that it becomes an appealing place to drive, bike, or walk, this immovable obstacle will feel less formidable. A renovation could be as simple as displaying public art, installing proper lighting, or ensuring that adequate safety precautions are visible. Making Jack London Square a distinct yet linked part of Oakland's physical form will enhance its sense of place while perpetuating the Green Movement as a city shaper.

Conclusion

Through the conduct of this study, I discovered that the two cities have faced similar challenges with different limitations when altering their waterfront. Though San Francisco is the identifiable destination of the area and Oakland is simply the *contra costa*, the desire to create an urban waterfront which locals and visitors alike could enjoy is a central motive for both cities' revitalization efforts. Both waterfronts boast unique culinary experiences, views of the Bay, and enjoyment on the water. The offices of the Port Authority both reside in these high-profile areas. Programmatically, market buildings in each, combined with weekly outdoor markets, form the centerpiece building. While this research has shown that the parallels between Oakland and San Francisco's waterfronts are numerous, it is impossible to ignore the stigmas affecting Oakland and larger long-term issues affecting both cities. Crime rates, industrial processes, and transportation concerns could hinder the success of Oakland's Jack London Square, while high-priced restaurants, limited open space, and high-levels of tourism potentially pose problems for the Piers in San Francisco. Further, both cities have been grappling with the difficulties of waterfront building and the most recent economic recession.

It is my hope that this study can provide the impetus for further investigation of how these cities and others can successfully redevelop their waterfronts, whether they consist of historic structures or still boast an active working shipping industry. San Francisco's preservation of its monumental City Beautiful buildings was central to the redesign of the Piers. How societal movements, such as the Green Movement, impact current redevelopment efforts is one area of further study. The burgeoning Green Movement is a driving force for many cities' urban revitalizations, due to the environmental benefits of density and infill. Similarly, investigations should be undertaken to determine how historic preservation can best be combined with adaptive reuse to produce culturally resonant, but contemporarily relevant urban neighborhoods. Further, research that identifies what type and style of building to promote when revitalizing cities, both on the water and inland, would be a resource to many cities. It is also important for future research to critically analyze the limitations of developing according to Green Movement priorities. Wisely utilizing existing features of a city to its full

potential redevelopments is key to creating or recreating a strong, identifiable sense of place in some of the country's most at risk cities.

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[2] Robert K. Yin, A *Applications of Case Study Research* (Newbury Park, CA, SAGE Publications, 1993). Yin is a commonly referenced primary resource for case study methodology.

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[5] Barbara A. Kayzar, "Analyzing the Revitalization Outcomes in Downtown San Diego." Ph.D. dissertation. (University of California, Santa Barbara and San Diego State University, 2006). The term "actors" as used for identification of interviewees is used within the conext of actor network theory (ANT).

[6] J. Amos Hatch, *Doing Qualitative Research in Education Settings.* (Albany: State University of New York, 2002), 72-116. Essential questions are considered the main focus of the study. Supplementary questions are defined as questions that relate to essential questions, but come from a slightly different angle. Probing questions are designed to persuade interviewees to talk about something specific.

[7] According to Hatch, bracketing includes personal thoughts and opinions to supplement the objective observations

[8] According to Hatch, organizing comparable interview data into a common form creates a more efficient method for triangulation. Ibid.

[10] Michael R. Corbett, *Port City* (San Francisco: San Francisco Architectural Heritage, 2010).

[11] Oakland's history

[12] Port of San Francisco, "Chapter 1: Waterfront Form," in the *Waterfront Design & Access Element* of the *Waterfront Land Use Plan*, http://www.sf-port.org/ftp/ uploadedfiles/about_ us/ divisions/planning_development/WaterfrontForm.pdf (accessed January 30, 2011). Finger piers are defined as piers which extend from the land surface into the Bay.

[13] According to the history in Corbett's *Port City*. Ibid.

[14] Woodruff Minor, *Pacific Gateway: An Illustrated History of the Port of Oakland*, Oakland: Port of Oakland, 2000.

[15] According to Minor in *Pacific Gateway*. Ibid.

[16] According to Corbett, the City Beautiful movement is defined as a general improvement effort for American cities which began with the World's Colombian Exposition in Chicago in 1893. Specific qualities of the City Beautiful movement include "ornamental streets, established cornice heights, monuments and fountains, and monumental public buildings." Ibid., 152.

[17] For example, paper would be shipped in rolls or reams. Fruits and vegetables were shipped in manageably sized cartons.

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[27] Simon Snellgrove (founder, Pacific Waterfront Partners, LLC), in discussion with the author, January 2011.

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[30] James Howard Kunstler, *The Geography of Nowhere* (New York: Touchstone, 1993). Christian Norberg-Schulz*, Genius Loci* (New York: Rizzoli, 1979).

[31] Two of the three restaurants tout local, sustainable menu options, a growing social movement that has had a strong presence in California. The third restaurant, La Mar, offers Peruvian dishes, mirroring San Francisco as a melting pot of cultures from around the world.

[32] Jerry Yudelson, *The Green Building Revolution* (Washington DC: Island Press, 2008) 1-12.

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[34] James Temple, "Developers Roll Dice on Oakland, California's Retail Draw," *Contra Costa Times*, November 17, 2004.

[35] Michael Hough, *Out of Place* (New Haven: Yale University Press, 1990).

[36] The City of Oakland, itself, recognizes its reputation of "high crime and underperforming schools" which makes "business attraction a long-standing challenge." Build a Thriving Economy, http://www2.oaklandnet.com/Government/o/CityCouncil/o/District4-LibbySchaaf/s/EconomicDevelopment/index.htm (accessed March 1, 2011).

[37] Jack London Square's notability as a catalyst development is reaffirmed by remarks by the Executive Director of the Port of Oakland, Omar Benjamin. Ibid.

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Mentor Comments: Because Annie's complete thesis could not be published, Professor Kim Sexton's comments provide an overview of the more comprehensive project that led to this article.

Annie Fulton's research on the contemporary state of the ports of San Francisco and Oakland is both topical and incisive. In this article, which is the outcome of her Honors thesis, this senior architectural studies major asked two overriding questions: how it is that the ports of two great American cities of about the same age and on the same West Coast bay have come to utilize their waterfronts so differently, and in what ways could the successful redevelopment of the port of San Francisco serve as model for the port of Oakland. At first glance, the answers might seem to be predetermined from the start: Oakland's notoriety as a dangerous and blighted city would seem to doom any revitalization initiative before it began, with or without the exemplar of the shining city of San Francisco across the bay. But, given her training in architectural studies, as well as her minor in environmental sciences, Ms. Fulton would not accept popular misconceptions at face value. With her academic focus on interfaces between the natural and the urban, as well as her keen interest in the San Francisco Bay Area, she proceeded with a scientific case study of the ports of San Francisco and Oakland, traveling to the Bay Area in summer 2010 and again over the holiday break in December. Ms. Fulton and I express our appreciation to the University of Arkansas Honors College, which awarded her two Undergraduate Research Grants and one Honors College Travel Grant, to assist her in completing her investigations in California.

Armed with well-developed criteria and questionnaires, she interviewed city planners, port commissioners, architects, and developers involved with the port projects. She logged on-site observations about daily use of the ports by inhabitants, including circulation patterns and activities. Visual documentation focused on specific areas of the ports: the Piers in San Francisco and Jack London Square in Oakland. While many professionals interested in the re-development of city ports are typically concerned with commerciability, Ms. Fulton's approach was distinctive in that she investigated the degree to which harbor settings form part of a city's identity, and on the roles nature and culture have played, and will continue to play, in the successful conversion of industrial zones into liveable places.

The conclusions of her study culminate in three points of action for Oakland's Jack London Square. Her first and most innovative point is urging the port authority of Oakland to embrace the Green Movement as a catalyst for urban development in much the same way that San Francisco had utilized the City Beautiful reform philosophy in the early 1900s (and, surprisingly, as Ms. Fulton demonstrated, in the late 1900s!). Secondly, she offers a creative proposal for replacing a trend toward frankly ingratiating tourism in Jack London Square with a strategy for fostering an authentic sense of place for residents and visitors alike. Lastly, she details steps to be taken to reconceptualize Broadway, a largely deserted connective thoroughfare between the port and downtown Oakland.

As a mentor, I was very impressed by the initiative Ms. Fulton exhibited not only in formulating her project but in conducting research independently and far from campus. Due to the inherently transdisciplinary character of the project, this researcher had to overcome many conceptual and practical difficulties on her own in order to bring her work to a successful conclusion. Because the subject is so topical, she had few precedents to follow. Studies like it are part of global efforts of the design professions, partnering with hard sciences and social sciences, to improve and save "obsolete" areas of cities and towns. In fact, just last summer, the Museum of Modern Art in New York featured an exhibition entitled, "Rising Currents: Projects for New York's Waterfront," which, like Ms. Fulton's thesis, imagines new ways to occupy a harbor. In many such proposals, "soft" infrastructures (public interfaces, computer technologies) meet the old-fashioned, hard infrastructure to serve the demands of sound social and natural ecologies. Her thesis – as well as the 2011 University of Arkansas Undergraduate Research Award – makes her a competitive candidate for a wide range of graduate programs with their growing emphasis on interdisciplinarity in professional education. I am confident that Ms. Fulton will one day be in a cadre of professionals whose creative solutions dramatically improve the relationship between people and their natural and cultural environments.